1: Gillin E-5 (1932-33) 1936 SR9 Carib SR9

a mile and a half below the Great Falls, is the "shop," or trading post, owned by Chee-a-Fat, a Chinese man of business whose base of operations is at Aranka on the Barama River. Aranka is twenty-nine and three-fourths miles distant from Towakaima via the now dilapidated government trail, which was built to connect the two rivers during the hey-dey of the gold rush. At the time of my study, the shop at Towakaima was in charge of one James Cook, a negro, and it boasted a very small and depleted stock of staple goods. The other "foreign" resident of Towakaima is Mr. H. Pestano who lives on his land grant of five acres, leased from the government. Mr. Pestano is a literate Portuguese Creole, formerly residing on the Berbice Coast. Mrs. Pestano, the daughter of a negro prospector and a Carib woman, is acquainted with the contemporary cultures of both of her ancestral stocks. Both the Pestanos are thoroughly versed in the ways of the Caribs and well liked by them. Many of Mrs. Pestano's relatives live in the Barama settlements. To the Pestanos I owe my thanks for valuable assistance in my efforts to understand the Carib culture.

Towakaima, in the days of the gold rush, was the station of a government warden, and the ruins of his house and office now lie, barely discernible among the ravages of wood ants and tropical decay, in a rank second growth of jungle near Mr. Pestano's present wattle and thatch house. During the period of mining activity, ended about 1912, Towakaima was apparently a vigorous outpost of civilization. I am told that in highwater Sproston's launch made regular trips up the Barama to this point, and that the now decrepit trail to Aranka, on the more easily navigable Barama, was fit for wagon traffic. About 1910, we hear, the firm of Farnum and Smyth had a shop for a period of a year on the Anamu, and regularly hauled tent boats over the falls by means of rollers and rope and tackle. These facts are mentioned in order to give a complete picture of the possible external influences which the inhabitants of Sawari may have felt. Even during the period of Towakaima's efflorescence, however, Sawari appears to have remained off the beaten path, still a day's walk through the bush beyond Farnum and Smyth's shop. And, so far as the Indians and other informants could say, white men had never visited Sawari previous to my appearance there, and it has been relatively free from outside contact. Nevertheless,

1: Gillin: E-5 (1932-33)1936 SR9 Carib SR9

431 AS IN MANY primitive COMMUNITIES, INSPITE of the importance of personal ownership, no member of the group is allowed to go in want. In all activities there is much sharing of property. It is distinctly understood, however, that all such sharing takes the form of giving and receiving, or of lending and borrowing. Anyone, therefore, who makes use of goods clearly not his own, without making a suitable arrangement with the rightful owner, is guilty of theft.

684 Adultery[1] is intercourse with the recognized mate of another individual. Personal attentions on the part of a man to a married woman are punished as adultery because they have but one meaning to a native. However, dalliance with an unattached girl is not considered adultery.

671 In the first two of these offenses intent, contrary to the practise of some primitive tribes, plays an important part. Accidental homicide and accidental poisoning, if the case is clear, do not call for satisfaction. Regarding sorcery, theft, and adultery, it is almost impossible for the Carib mind to conceive of the commission of these acts without malicious intent.

The Carib philosophy on the matter of intent, stated in our terms, follows the reasoning that accidents are to be classed along with that whole group of natural incidents which are often injurious and inconvenient to human beings. The causes, however, are spiritual or supernatural, and the results are due to transgression, perhaps unconscious, of a tabu. If a man kills or poisons another through accident, he is merely acting as unconscious agent of the spiritual powers who constitute the effective agent and cannot be punished. Personal antagonism, in such a case, is eliminated, the solidity of the group is unaffected, and retaliation has no function. But when a man commits an offense of his own

175 [1] Adultery was introduced after white contact among the Caribs of the islands, according to Rochefort. Says he, "Heretofore they knew not how to punish this crime, because it reigned not among them before their commerce with the Christians; but now if the husband surprises his wife prostituting herself to some other or have otherwise any certain knowledge of it, he does himself justice, and seldom pardons her, but dispatches her, sometimes with his club, sometimes by ripping up her belly from above downward with a razor or the tooth of an agouti, which is nearly as sharp. This execution being done, the husband goes to his father-in-law and tells him in cold blood, 'I have killed thy daughter, because she proved unfaithful to me'. The father thinks the action so just that he is so far from being angry with him, that he commends him, and conceives himself obliged. 'Thou hast done well,' replies he, 'she deserved no less.' And if he hath any more daughters to dispose of he immediately proffers him one of them, and promises to bestow her on him at the first opportunity." de Rochefort, 1658, *Histoire Naturelle et Morale*, pp. 548–549, quoted in Roth, 1924, *An Introductory Study of the Arts, Crafts, and Customs*, pp. 561–562.

In early times on the Orinoco, according to Gumilla, all recognized adultery, "notably when women commit it, but the Carib is the only nation which has a punishment fixed for adulterers, who are put to death by the whole village populace in the public place." Gumilla, 1791, *Historia natura, civil y geografica de las naciones situadas en las riveras del Rio Orinoco*, Vol. I, p. 132, quoted in Roth, 1924, *An Introductory Study of the Arts, Crafts, and Customs*, p. 562.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

THE BARAMA RIVER CARIBS OF GUYANA RESTUDIED: FORTY YEARS OF CULTURAL ADAPTATION AND POPULATION CHANGE

Abstract

by

KATHLEEN J. ADAMS

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The Caribs of the Upper Barama River drainage basin in the North West District of Guyana are restudied. About forty years ago, this population practiced a semi-nomadic adaptation to the rain forest. Now these Caribs benefit from national medical programs and participate in regional markets for labor and local commodities. The Upper Barama River Carib population is investigated for changes over time in aspects of its behavioral patterns which have affected its size, distribution, and organization relative to resources available in the natural and social environments. Regional influences are examined, and analyses are made of productive activities and patterns of sharing and direct exchange as this small, relatively isolated population has been integrated into a national political economy.

121 informants or locations, another dimension is added here. Individ-
114 uals can be identified and the establishment of trans-generational
124 continuity is possible.

121 Two areas of theoretical concern particularly lend themselves to
*177 investigation under the fortuitous circumstances of being able to
[161] trace changes occurring over time among a specific group. The first
is cultural change: the second, human population control mechanisms.

175 In regard to cultural change, until forty years ago the Caribs
*177 of the Upper Barama River were adapting to the equatorial rain
182 forest with essentially a lithic technology. They combined hunting,
[22] fishing, and collecting with a semi-nomadic form of horticulture.
[241] Currently, the majority of these Caribs are settled at a community
*177 known as Baramita Air Strip. They engage in wage employment, make
[465] use of regional markets for local products, participate in agricul-
[438] tural development programs, and benefit from national medical
[242] programs. From a position of relative isolation in the rain forest,
[657] this group has been increasingly encapsulated in the national
[161] political economy. Attending this development has been changes in
their population size and composition as well as internal organiza-
tion. These changes are a major focus of the present study.

121 In pursuing the analysis of these changes, cultural materialism
is relied upon as the most economical mode of explanation. Among
others, Harris (1968) has proposed that techno-environmental
determinants can serve in a comparative approach to cultural
adaptation. One example of this approach is Murphy and Steward's
comparison of the Mundurucu of Brazil and the Northeastern

Other
*177 resources have been introduced through economic channels. Over time,
169 outsiders have been attracted into the area. Men have come to seek gold, missionaries to save souls, and currently, government programs have been introduced to develop Guyanese citizens. Each of these lenses of influence has served to introduce new resources to the local population, linking the Upper Barama area with regional transportation and communication systems and regional economic markets.

Early Gold Activities

• 175 At the end of the Nineteenth Century, gold was discovered in the
*177 North West District. Prospectors, or porknockers as they are locally
[135] called, came to seek their fortune in the bush. Principally, these were Afro-Guyanese men recruited from peasant villages along the coast (Smith 1969). Alluvial gold has been worked on the Barama and its tributaries at least since 1896 (Bishop 1941). From 1898 to 1912, the height of the early mining activities, the total gold production from the Barama area amounted to 99,169 ounces (Bishop 1941:20). This production was not exclusively from the Barama River drainage. Access to placer deposits on the Cuyuni River was gained from the Upper Barama which is more navigable than the Cuyuni.

There is no record of the number of men involved in these gold activities. Porknockers often came as partners in groups of two or three. They would work for a number of months and then return to Georgetown. Bishop estimates that in 1937-38 there were about 500 men working gold in the entire Barama River drainage basin. However,

175 most of these men were located on the Lower Barama below Towakaima.
*177 Also, by this time gold production had fallen off. Only 18,094 ounces are reported for the period 1912 to 1935 (Bishop 1941:20).

Although the numbers of gold seekers that came to the Upper Barama cannot be known, the changes they promoted are apparent. Over time, the reappearance of these prospectors led to the establishment of interdependencies between gold seekers and Amerindians.

175 In their effort to accommodate themselves to bush living, porknockers
*177 bought or traded for provisions and labor, and fathered children with
439 Amerindian women. In addition to these rather dispersed, situational relationships with local Amerindians, porknockers also interacted with middlemen who established shops in the area. The porknocking activities provided a potential market into which the middlemen moved to buy gold and sell provisions.

Accordingly, transportation was extended to link the Upper Barama area to other outposts in the North West District as well as to Georgetown. Gillin reports (1936:107) that for about a year around 1910, the firm of Farnum and Smyth had a shop on the Anamu, a tributary of the Upper Barama. This shop was supplied by a tent boat hauled over the Great Falls by rollers, rope, and tackle. Also, by 1930, Chee-a-fat, a Chinese businessman, had established a shop below the falls at Towakaima. Sproston's launch made trips to Towakaima to serve this shop. Sometime before 1937, I. G. Ribeiro opened a shop on the opposite bank (Bishop 1941:4). Ribeiro owned his own boats to connect this shop to his other shops lower on the Barama. Similarly, Chee-a-fat's shop was an outpost of his central location at Aranka on the Lower Barama.

000 at Aranka on the Lower Barama.

*177 All during this early period of gold activities, the river system
• 175 predominated as the route of transportation and communication. To
[489] move down the river was to go toward greater penetration of outside influences. Conversely, the Great Falls at Towakaima remained the
133 gateway to the Upper Barama. However, the Upper Barama is often
487 unnavigable. The water height fluctuates greatly with seasonal rainfall. The low water level exposes numerous fallen trees and
*177 impedes or prohibits river travel. Thus, the bush trails that follow
175 along the river course were as important for transportation as the
487 river itself.

There also existed bush trails which ran overland between the Barama River and the Cuyuni River to the south, and the Barima River
*177 to the north. During the peak of early gold activities, a government
175 trail connected Towakaima, located on the Barama River, and Arakaka,
653 located on the Barima River. This trail was about twenty-nine miles
487 long, graveled and ditched for use by mule and cart traffic. However, by 1932, this trail had fallen out of use (Gillin 1936:107).

*177 Clearly, the river system was the lodestar of direction used by
175 the early gold seekers. Also, with river travel and bush trails,
[489] internal communication and transportation links within this region of the North West District were more developed than links to Georgetown. Later, air travel eclipsed the river as the main artery of communication and transportation. The most immediate links outside the Upper Barama area became those to Georgetown via Timehri Airport.
[439] The nature of the material exchanges which flowed along regional networks also changed.

000 networks also changed.

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Mining Companies

A second phase of gold activities was marked by mining companies and the establishment of camps of permanent operations. In fact, with lighting plants, mills, shops, barracks, residences and so forth, these camps had an imposing appearance in the remote bush.

All of these camps were located within a few miles of each other, close to the confluence of the Barama and the Baramita. Gold claims here were originally discovered by three brothers who came as porknockers to work alluvial gold. However, it was not until companies were formed which could cover the initial expenditure for quartz milling equipment that these claims were extensively worked. Two companies undertook this more elaborate gold mining. They were the Axel Johnson Company and that of the partners Baird and Dragten. Both attempts were eventually defeated. A third company, formed by previous porknockers, made only a brief appearance in the bush from 1943 to 1945.

Certainly the most ambitious of these efforts was that of the Axel Johnson Company, a Swedish-based international enterprise with subsidiaries. In 1934, an expedition was fitted out and arrived at Mazawini Landing on the Barama (Bishop 1941:23). The objective was to cut a line through the bush to Old World, their claim about forty miles away near the source of the Barama. This line would initially serve to haul in mining machinery and later it was to be used as the route of transportation to sustain the undertaking. However, due to

*177 • 175 a lack of preliminary surveying, the expedition proved abortive after penetrating only eight-and-a-half miles into the rain forest. An Allis-Chalmers caterpillar tractor, a trailer, ball-mill, producer gas plant, and other equipment were abandoned in the bush near Macaw Creek. There they served only for the amusement of the Amerindians who made a game of competing to throw the balls the greatest distance.

In spite of this considerable loss, the Axel Johnson Company was not discouraged. Rather, new means were employed to overcome transportation obstacles. In addition to river and bush trail transport, in 1947, air travel was initiated in the area. With the prospect [653] that large sums of money would be spent in the colony to open up this remote area, the Government built an air pool for the mining activities in the Upper Barama. Unassembled equipment was flown in by small aircraft and Old World became an established mining camp.

However, transportation was not the only obstacle to success. Operating on an international basis with prodigious expenditures, the Axel Johnson Company was closely tied to international money markets. In 1949, Britain devalued the Pound Sterling. With the international price of gold set at $35 (U. S.)[2] an ounce by the International Monetary Fund, the company could no longer profitably operate Old World. Despite the removal of a 50¢ per ounce royalty in 1948, and increased production from 286 ounces in 1948 to 1,858 ounces in 1949, Old World was closed. The death of two miners due to an explosion from a gasoline engine in the shaft, and after that the occurrence of a strike, also may have contributed to the abandonment of Old World.

The Baird and Dragten company was indigenous to the colony. It

also eventually failed. Rather than expanding an established enterprise, the object was to start one. This company grew out of more generalized porknocking and was based on long familiarity with the Barama River drainage basin.

At the age of seventeen in 1931, Wesley A. Baird came with his father and his father's partner, C. S. Dragten, to work alluvial gold at Kokerite. By 1935, the three of them were working in the Upper Barama area near the confluence of the Barama and the Baramita. For $2000 paid in advance to Booker Brothers, McConnell & Company, the partners received a ball mill, an eight kilowatt electrical generator, a crusher and other machinery. They were credited the balance.

The three men started operations at Golden City. In 1947, the son and partner bought out the older Baird. When the Axel Johnson Company removed from the area, the two remaining partners rented Old World starting in 1950 for $500 a month. In 1950, Baird and Dragten recovered 391 ounces of gold; in 1951, 594 ounces; in 1952, 1,022 ounces. They stayed at Old World until 1953, then moved back to Golden City. Later, Baird moved to Millionaire, and by 1957 he was operating alone in the area. In 1957, Baird produced 1027 ounces of gold; in 1959, 820 ounces. Baird's last move, in the early sixties, was to the camp Reserve from which the mine In Time was worked. This last mine proved to be his nemesis.

For the most part, Baird was defeated by unreliable transportation and communication on which his mining enterprise depended. In the rain forest, the mine shaft had to be continually pumped of water. Three times fuel failed to arrive and the shaft was flooded and

damaged. Twice the shaft was repaired. However, after considerable financial losses over a period of fifteen months, the third inundation of the shaft forced Baird to close the operations late in 1969. Government attempts were made to sustain In Time mine. These did not succeed. Government influence in the Upper Barama River area was rechanneled through a structural reorganization which will be discussed later.

In any event, both of these companies had a long term local impact. Although incorporating negligible bush materials and Amerindian labor, the brief existence of the Axel Johnson Company increased the accessibility of the area. Wesley A. Baird's activities contributed significantly to local participation in material exchanges along regional communication and transportation networks.

The building of the air pool already has been mentioned. Previous to its existence, cargo was shipped either up the Barima River or up the Barama River during short periods of high water. Men then carried the supplies overland to the mining camps. The Axel Johnson Company initiated a survey for an air strip. However, this project ceased when Old World was closed. Impressed by Baird's continuing gold activities, the Government carried on the surveying and finally located high ground for an air strip. In 1953, the Baramita Air Strip was constructed. The air pool served to bring in equipment which was assembled in the bush. At the same time, Wapishana Amerindians were brought in to serve as laborers. The completed air strip of approximately 300 feet cost about $80,000. For easy access between the air strip and In Time, Baird undertook the building of a

*177 *175 five mile road for tractor and trailer. This was completed at the estimated cost of $2 a foot in the early 1960's.

As with the air pool, the use of the air strip depended on contracting charter flights. The relatively high cost of passage, plus limited access to this travel through the radio phone and contacts in Georgetown, tended to make air travel an exclusive means of transportation. Only those few individuals who were economically involved in the gold market could use it. For them, the 170 miles to Georgetown were only an hour's distance.

*177 175 439 Attending his mining enterprise, Baird became the broker controlling access to gold and manpower in the Upper Barama River area. He incorporated bush materials and Amerindian labor rather than maintaining a totally supplied enclave. As will be detailed in a subsequent chapter, this greatly influenced local Amerindian cultural adaptations. By relying on bush resources as well as regional markets, Baird was able to withstand for a time the rising cost of production in the face of the constant price of gold. However, his balance between the generalized porknocking and the specialization of industrial gold mining eventually was tipped. As his operations became more immersed in a money economy and his equipment of the nature that had to be regularly sustained by fuel and manufactured parts for repairs, he could not fall back on bush resources. Local bush materials and Amerindian labor could not sustain him during periods of isolation from regional markets. Thus, after thirty-five years in the Upper Barama River area, Baird's gold mining activities were specialized to the extent that they no longer could be maintained

*177 independent of regular contact with regional transportation and
• 175 communication.
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Nevertheless, the relationships Baird established during this period are critical to our analysis. Over the years, he clearly became the middleman through whom a local economy interfingered with
175 the regional economy. He supplied limited employment opportunities
*177 and market outlets. Thus, a number of Amerindians left aside sub-
464 sistence farming and depended on the wage work he provided. Others sought occasional employment, and still others supplied provisions for those engaged in mining activities. All of this had an important impact on the Amerindian population.

*199 In effect, Baird became a patron of Amerindian clients. As such,
175 he was subsequently the person through whom government services were
466 introduced and government support was elicited. During the later
659 years of Baird's gold mining activities, government health care was first introduced. The support elicited was a call for Amerindian votes. Eventually, when Baird gave up mining, he assumed an official role as government employee. His position as the broker controlling access to the Amerindians in the Upper Barama was clearly underscored by the missionary attempt to establish a similar relationship.

Missionaries

175 The Pilgrim Holiness Church Corporation is a fundamentalist
*177 organization based in the midwestern United States. They have been
997 active in Guyana at least since the early 1920's. Their early activities were on the coast and later expanded into the interior.

175 The brief existence of their mission in the Upper Barama River area
*177 is recorded only by a few poorly remembered portions of dogma. The
797 health services, occasional employment opportunities, clothing, ammunition, and food commodities the mission provided had a far greater impact.

In 1963, a reverend from the Pilgrim Holiness Church established a mission at Baramita Air Strip. He came alone at first to make a camp. Later he brought his family. In 1965, this family was replaced by another missionary family. Also, a nurse came to open a
[726] clinic. In the spring of 1969, following the unsuccessful Rupununi Rebellion,[3] the missionaries left Baramita Air Strip as requested by the Government. The abandoned missionary buildings and twenty acres of ground were later incorporated into community development service.

[657] The isolationist program of the Pilgrim Holiness Church was in conflict with the Government's goal of Amerindian integration. They disclosed a strategy of imposing their mission as the exclusive link between the Amerindian people and outside influences. Accordingly, they were equipped with independent means of communication and transportation - a radio phone and a small plane. With these, the missionaries were free to disregard national boundaries in their efforts to secure a congregation by providing for the material wants and needs of the Amerindians.

However, the missionaries came too late in the history of the Upper Barama River to compete as middlemen in controlling access to the Amerindians. With their limited resources, they were unable to

175 co-opt the permanent exchange relationships which Baird had already
*177 established. The missionaries' greatest success had been with those
997 few people living at the Air Strip who were not immediately affected
by the local mining economy. Furthermore, Baird, with his long
standing allegiance to Guyanese nationalism, had always acted as the
emissary for the Government in the region. In contrast, the American
missionaries operated internationally in the promotion of their own
interests. Clearly, Baird was the obvious choice for government
(648) support in this strategic frontier outpost close to the Venezuelan
border, particularly since 1962 when Venezuela reopened a border
dispute along the North West District.[4]

175 International events have made the remote Upper Barama River area
*177 strategic to Guyana's national development. In order to secure the
659 hinterland, programs have been designed to tie these areas to the
national political economy. In the Upper Barama area, this goal has
been implemented by a settlement project at Baramita Air Strip.

The Baramita Air Strip Settlement

175 Late in 1969, Baird ceased mining operations altogether. His
*177 imminent withdrawal from the area would have left many impoverished
Amerindians exposed to the potential of Venezuelan influence. It
was also important not to abandon the air strip close to the
*177 Venezuelan frontier for other than Guyanese use. Thus, government
175 programs were introduced with new resources administrated by new
659 personnel. Baird moved to Baramita Air Strip where he assumed a
361 salaried position as Project Officer in the Department of Interior

*177 Development. The Amerindians who had previously worked for him quit
• 175 their settlements around the mine and followed Baird to the air strip.
657 In Time, Baird's mine, was left derelect; the era of gold activities
361 was ended. Resource opportunities in the area now tend to be concentrated at the air strip, and the Caribs have nucleated around them.

*177 To some extent, government programs and services had reached
175 these Amerindians before the creation of the Baramita Air Strip
657 community. Due to the remoteness of the area, the Aboriginal Indians Protection Ordinance of 1910 little affected the Upper Barama River Caribs. Likewise, the government policy of Amerindian integration expressed in the Amerindian Ordinance of 1951 did not directly affect these Caribs either until recently. The extension of health services and participation in national elections have already been mentioned. Since 1960 , a malaria eradication program has been conducted in the area. This includes testing the population with blood smears, distributing salt medicated with chloroquine, and spraying habitations with DDT. Also, at various times, health teams were sent into the bush to treat epidemics. Individuals too sick to benefit from locally available care have been sent by plane to public health facilities in Georgetown. However, in addition to these measures, aid for more moderate disabilities and preventive health care were added with a resident Medical Ranger.

*177 Health services, a government school, markets for crops, and
657 agricultural assistance are now locally available. A Medical Ranger, an Agricultural Field Assistant, and a School Master are in residence. A doctor holds a clinic once a month at the Air Strip. All of these

*177 facilities for local community development have been introduced in
657 the period of a few months. The structure through which they are available is diagrammed in Figure 3. Baird's autonomous position as a gold miner has changed. As Project Officer, he is now responsible for locally implementing government programs and supervising facilities that cut across the responsibilities of several Ministries. These include the Ministry of Health, Ministry of Education, Ministry of Agricultural and Natural Resources, and Ministry of Local Government. In addition to his position in the Interior Development Department, Baird is also an agent for the Post Office Department, Civil Aviation, and Guyana Airways Corporation. By July 1970, the
*177 Baramita Air Strip community was established. Two new buildings
361 constructed along the air strip to house government personnel add to the appearance of a settlement.

*177 In addition to these services for the population, the Ministry of
622 Local Government has provided for the development of local Amerindian
[66] leadership. As with all Amerindian populations in the interior, local elections are held. The first occurred in the Upper Barama River area at In Time in October 1967. A second election was held at the air strip in October 1971. A Captain and three Councillors are chosen. The Captaincy is a salaried position; councillorship is not. Thus, one more source of external resources is available to this population.

*177 The question of local land tenure also has received government
• 175 attention. However, the Amerindian request for land titles occurred
423 without the participation of the Upper Barama River Caribs who have
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[TEXT CONTINUED ON PAGE 32']

*177 remained uninformed of the following steps. In 1962, the Amerindian
• 175 Association was formed. During the 1965 Conference to discuss
423 Guyana's independence, their petition was successful. The granting
657 of legal ownership or right of occupancy over land to Amerindians was included in the body of law resulting from this conference. An Amerindian Lands Commission worked from September 1967 to August 1969. With regard to the Upper Barama River area, no title requests were submitted. The Commission recommended the encouragement of a nucleation of the scattered population and the establishment of a protective district in which land is set aside for the use of Amerindians (Amerindian Lands Commission 1969:204). Figure 4 is a map presenting the boundaries of this proposed district.

*177 In short, the development of citizens is currently the sole
657 activity in the Upper Barama River area supported by an outside agent, the Guyanese Government. Limited transportation and communication facilities continue to be an obstacle, as they were to those seeking gold. Interior air transportation is subsidized by the Government. Guyana Airways Corporation has a scheduled flight on Friday mornings to Baramita Air Strip, a stopover on the regular route to Matthew's Ridge. However, the flight is subject to delay and cancellation. Also, there is no certainty which week expected cargo will arrive. Passage to Georgetown is $26 and cargo is 13¢ a pound. These prices are beyond the means of the local Amerindians. Thus, air travel remains exclusive. However, the Guyana Marketing Corporation pays the air freight of agricultural produce.

*177 Overland transportation which would provide quick, cheap, reliable

[TEXT CONTINUED ON PAGE 34]

*177 access to markets within this region of the interior does not exist. However, a road linking the Baramita Air Strip to Matthew's Ridge, about thirty-six miles away has been proposed and is much discussed. Should such a road be built, the Upper Barama area would again be more closely tied to other areas within the North West District than to Georgetown.

*177 To summarize, the succession of influences which have affected
● 175 the Upper Barama area are the gold prospectors, mining companies, missionaries, and currently, government programs. In relation to the local population size and social organization, these lenses of regional influence remain a situational component. In effect, they have provided the social environment to which population size has responded and cultural patterns have been reorganized. As is evident, there has existed no persistent source of external resources which overrides the importance of maintaining adaptations to local resources. Unreliable communication and transportation render external resources undependable. However, the manner in which external resources have reached these Caribs as well as their impact on the population size and social organization remain to be considered.

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

III

SETTLEMENT PATTERN AND POPULATION SIZE

175 162 From 1932 to the present, the core of Carib people who have remained in the Upper Barama River area have been recruited from the indigenous population.[1] The continuity of the 1970-71 population with that existing in the Upper Barama River area during 1932-33 is readily apparent. First, one person in present at both time periods. 159 621 Charlotte[2] was an adolescent wife of John Miller, the headman of Sawari, when Gillin made his study (1936:118). She is now a widow in her late fifties and lives with her two daughters and son-in-law at the Air Strip. Charlotte's son by Adolphus Miller, who took her as a wife when his father died, is also present. Two other children of John Miller, a son and a daughter whose mother was Charlotte's sister also are in residence at the Air Strip. These relationships are summarized in Figure 5.

Tracing the continuity in a different manner, Rosa Jacob is about [602] sixty years old and is a prominent resident at the Air Strip. She can recall a kinship relationship to all of the other residents. She is a cross cousin to John Miller, his father's sister's daughter. Of course, all of these people except Rosa are deceased. Exact relationships among all individuals in the population cannot be established as memories are shallow regarding kinship. Nevertheless, it can be safely assumed that all members of the Upper Barama River Carib

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602 population are related in some manner.

In addition to a generational continuity of the human group
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571 involved, there has also been a continuity in interaction. That is,
166 during the period under consideration, material exchanges and the migrations of individuals among Carib settlements in the Upper Barama area have been more pronounced than such exchanges with outside settlements. This permits the Upper Barama Caribs to be
[121] identified as a single adapting population for the purpose of this
*177 analysis (Rappaport 1969:184). However, the frequency of contacts
361 and the nature of movements among settlements have changed. Specifically, small, dispersed, semi-nomadic social units have given way to nucleations around centers where external resources are available. In this context, different settlement patterns would appear to represent different adaptations devised by the same group of people
[161] to meet differing conditions. Differing rates of population growth also would appear to be the result of the changing circumstances.

Settlement Pattern

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361 During 1932-33, Gillin estimates a Carib population of not more than 600 for the entire Barama River area (1936:113). In all, thirty-three settlements were located along the Barama River (1936: 110). About ten[3] were above Towakaima (see Figure 6). This includes the Saveri[4] settlement for which more complete population data were
175 recorded. The population for this settlement consisted of forty-seven
161 individuals (1936:110). Since the primary adaptation was to the rain
162 forest, there were no reported concentrations of population in the
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Figure 6. Map of Settlements,* 1932-33 (after Gillin 1936:2).

*Data are not available on the population sizes of these settlements. Individuals in settlements fluctuated between fifteen to fifty in number (Gillin 1934:333).

[162]

Upper Barama area. Rather, the settlements were dispersed along the river corridor and varied in population size from fifteen to fifty individuals (1934:333).[5] The Carib settlements were named for the creek they were near (1936:98), and house structures were located in the cultivated fields. Thus, locations fluctuated around a creek as well as among creeks. Accordingly, ten inhabited settlements in the Upper Barama River area could be estimated to represent a population of perhaps 200. This number is also supported by genealogies recorded in 1970-71.

With respect to interactions among these settlements in the Upper Barama River area, Gillin reports that the residents of Savari were in contact with Haiari, Kwamata, and Kureva (1936:106). He also reports that this group of Caribs was "completely out of touch with those farther up the river" (1936:106).

Subsequent inquiry reveals this may not have been the case.[6] Verbal communication as well as a recognition of kinship relationships seem to have been maintained throughout the Upper Barama River area during this early period. In 1970-71, one informant remembers that as a small boy he accompanied an adult male relative on a walk from one of the settlements in the upper section of the Upper Barama River to visit other relatives in Savari. They were lured by news of the white man (Gillin) living there and curious enough to go and see for themselves. However, when they reached Savari, Gillin was in Georgetown. The travelers had to content themselves with a close examination of all the camp gear.

Contacts among the Carib settlements on the lower section of the

175 628 Upper Barama seem to have been more frequent than contacts among the Carib settlements in the upper section of the Upper Barama. However, it is also apparent that the most immediate external contacts each group of settlements had were with each other.

In 1932-33, the frequency of contacts seems to have been relative to distance. That is, no specialized settlements are reported in respect to seasonal or other activities. All Carib settlements seem 175 361 [82] to have been much alike in their dependence on the rain forest. The bush resources relied upon include predominantly territorial animals and widely dispersed plant species. Desirable land for cultivation, a mixture of sand and clay on a hillside in close proximity to a permanent stream, was limited (Gillin 1936:14). As a consequence, settlements are widely scattered. Figure 7 depicts the dispersed nature of Carib settlements in the Upper Barama River area for this earlier time period. Realignments would occur with the relocation of settlements. After a number of years, a move might be made to more advantageous hunting and gathering and more fertile soil. Other cultural practices as well promoted this scattered, shifting pattern [586] of settlement. A divorce tended to result in the relocation of [572] individuals (Gillin 1936:79-80): the rupture of male friendships, in [775] the relocation of households (1936:136). Also, due to a belief in [768] the malevolent nature of a person's spirit, a clearing would be abandoned in the event of a death (Gillin 1936:165).

175 *177 361 Later, with the availability of external resources, settlements were no longer scattered solely along the Barama River corridor. Over time, a centralization of settlements developed in relationship

[TEXT CONTINUED ON PAGE 43]

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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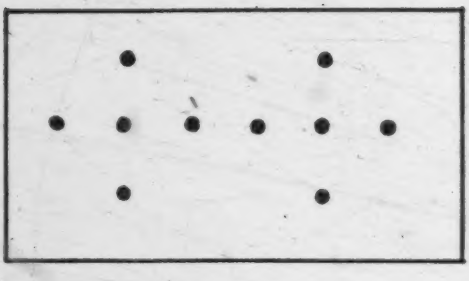

Figure 7. Dispersion of Settlements along River Corridor, 1932-33.

175 to employment opportunities. Around the mine In Time, a nucleation
*177 of population is clearly evident. The settlements further away from
361 the mine were the first abandoned. Many of these people left for Matthew's Ridge or the Cuyuni River. However, the employment and market opportunities at In Time attracted and supported the largest portion of the local Carib population.

*177 The permanent workers at In Time had no large farms. They resided
175 close to the mine and bought provisions. There were two of these
361 residential groupings, one around the mine and one at Big Creek. In
162 the spring of 1969, there were 103 residents near the mine and sixty-eight at Big Creek. Also, three satellite settlements dependent on frequent opportunities to sell provisions and occasional employment were located less than ten miles away from the mine. These were Aranka with a population of ninety and Baramita[7] with forty-seven (see Figure 8). In addition, fifty-three people were located at Baramita Air Strip itself. By this time the declining activities at the mine and the limited opportunities provided by the missionaries attracted some people to the Air Strip. The remaining population was located in more remote settlements including thirty-nine at Piai Creek, thirty-six at Korotoko, thirty-four at Barama Head, twenty-nine at Korisho, and five at Maswakai.[8] The average population size of
[161] these more remote settlements was about thirty-five people.[9] Thus, the total population was 504.

*177 It must be noted that the Amerindian Captain has been active in
175 attempting to settle Carib people at the Air Strip. In 1969 he had
361 a measure of success among the 119 Caribs from the five settlements
622

[TEXT CONTINUED ON PAGE 46]

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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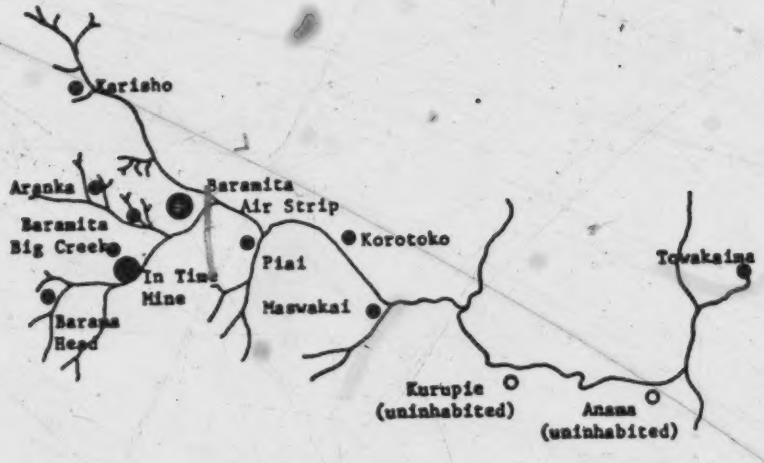

Figure 8. Map of Settlements, 1969.

175 in the headwaters of the Barima River. He was able to convince
*177 several men from Cedar, one of the settlements, to cut a communal
361 farm at Black Water Creek, about two miles north of the air strip.
622 For a time, twenty-four people from Cedar were living there. Later, they went back to Cedar, only sporadically returning to camp out for a few days or so to make use of the facilities at the Air Strip. It is clear that this smaller Carib population from the headwaters of the Barima River remains peripheral in an analysis of cultural change among the Upper Barama River Caribs.

*177 Figure 9 summarizes the settlement pattern in the Upper Barama
175 area in 1969. The greatest nucleation of population occurred in
361 zone a. There, 171 people were directly supported by mining activi-
464 ties at In Time. In zone b, the larger but more dispersed population of 190 was more indirectly involved in the mining economy. Lastly, the remaining population of 143 was dispersed in five more independent settlements in the rain forest. Settlements are varied in purpose. However, the Upper Barama River Caribs as yet do not have two or more house sites where they engage in different activities.
[657] This occurs with the introduction of government programs and services at Baramita Air Strip.

*177 During 1970-71, the population located in the Upper Barama River
361 area was centralized in varying degrees around Baramita Air Strip
162 (see Figure 10). In the summer of 1971, there were 333 residents at the Air Strip. Of this number, 232 are permanent residents. The remainder are mobile, part-time residents who also maintain farms in the more remote settlements. Also in the spring of 1971, Aranka had

[TEXT CONTINUED ON PAGE 50]

2: Adams E-4, 5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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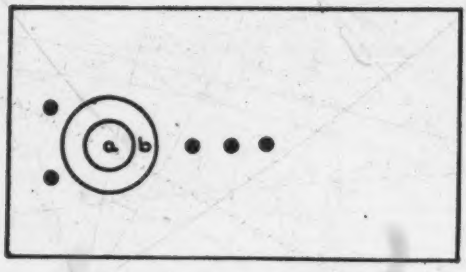

Figure 9. Partial Centralization of Settlements around Mine, 1969.

traced over a forty year period during which external resources have been added to those locall- available. Fortunately, the external resources under consideration, employment and exchange opportunities and medical care and other government services, have been introduced with sufficient separation in time so that their specific relationships with population changes can be investigated.[11]

In 1932-33, Gillin observed that the Upper Barama River Caribs were relatively unaffected by external influences (1936:111). Their population size reflected the local emphasis of their adaptation. As already mentioned, it can be estimated that there were about 200 Caribs in the Upper Barama River area during 1932-33. At this time the ratio of adults to children was about one to one (1936:204). For adult classification, Gillin required males to be over twenty-one and females over eighteen (1936:205).

For the Sawari settlement in the Upper Barama River area, Gillin recorded forty-seven individuals (1936:110). Of this group, twenty-six are adults and twenty-one are children. This includes thirteen men and seven boys, fourteen women and thirteen girls. In this instance, puberty distinguishes adult from child. For some individuals, Gillin estimates their age as an aspect of general description, but he does not do this for all individuals. Consequently, little can be said regarding a more accurate age structure for this early time period.

Regarding behavioral patterns that regulate population size, Gillin reports no restraints on the sexual activity of married partners except for an abstinence of about a month after the birth of

175
168 a child (1936:76). No adult of reproductive age seems to have re-
834 mained for long outside of a marriage bond. Extramarital sexual
[837] encounters were not uncommon, and adolescents were not prevented from
[836] sexual experimentation (1936:72). The separation of sexual partners did not intervene to limit population size.

175 Contraceptive measures are reported to have been familiar to both
168 men and women (1936:73). These include "bush medicines" and "ritual-
842 istic treatments" performed by a piaiman or shaman. However, the
[756] exact species are not identified and their efficacy as well as the incidence of their use are not noted. Old women were reported to have
[887] been experienced in inducing abortions through the use of an infusion
[847] of bush herbs and manual manipulation including the insertion of small, sharp sticks.

175 Aside from these behavioral controls, there apparently were
145 physiological factors at work. These are mentioned but their effects
168 cannot be established. Gillin notes, for example, that it was rare for an adolescent girl to become pregnant (1936:73). Regarding this observation, Gillin suggests that temporary sterility and ineptness of technique may explain the lack of p[illegible]ncies. Also, the incidence
[164] of malaria, hook worm, round worm, and other parasites may have contributed to periods of sexual inactivity and temporary sterility as well as affecting the mortality of infants and others.

175 In sum, for the 1932-33 period, those behavioral and physiological
162 factors which affected population size were recorded without regard for their situational context. Still, the reproductive results seem clear: i.e., the ratio of adults to children was about one to one in

175 a population of approximately 200 people. This provided a density of
162 approximately one person per five square miles along the Upper Barama
[161] River corridor.

*177 Over time, with the introduction of external resources, this
162 relationship has been changed. The niche of the Upper Barama Caribs was first extended by exchange and employment opportunities. Peberty's observations (1948) on this population were made during the first ex-
[161] tensive involvement in employment. However, the data presented take the form of estimates rather than actual figures.

114 Peberty visited the Upper Barama River area sometime between
161 December 1945 and February 1946 for the purpose of making suggestions
181 for Amerindian development. He reports that "The Upper Barama River Caribs are the most impoverished and traumatic aboriginal group that I have encountered throughout the length and breadth of British Guiana" (1948:20). In part, he attributes this condition to the loss of Carib crafts as a consequence of opportunities with the miners.
[165] Peberty reports further an unspecified but "relatively high" infant mortality (1948:15). However, he provides no explanation. Also, he suggests that a reputed decline in the population is related to the "morbid conditions of these contemporary Carib groups" (1948:20). He estimates about 474 Caribs for the Upper Barama River area and the
114 Barima tributaries (1948:15). Little can be said regarding population
161 increase or decrease at this time from his observations. However, there is one indication that the population size reported by Gillin was little changed. In 1953, eighty-eight adults were registered to
[166] vote in the Upper Barama River area.

175 *177 161 [464] Clearly by the 1940's, exchange and employment opportunities play an important role in respect to this Carib population's adaptation. Men were being regularly engaged in mining activities and increasing numbers of them were permanent workers for Baird. Despite Peberty's comments, there is evidence that the reproductive pattern was greatly changed.

175 *177 162 In 1960 government census provides the first evidence of this increase in population size. Unfortunately in this report, the inhabitants between Kokerite and Towakaima were counted with the Upper Barama River Caribs. In this larger group, there were 565 people, including 285 males and 280 females. As a partial indication of what portion of these were in the Upper Barama River above Towakaima, 142 adults from this area were registered to vote in 1961. Table 6 presents the age structure and sex composition of the larger [163] Carib group. Also, for the year preceding the census, there were 13 births all occurring to women under 45. Expressed as a crude birth rate, this is 23.5 births per thousand total population.

175 657 In the investigation of the change in population size, it must be pointed out that early health care was haphazard at best. Systematic health care was not available until very recently. It should be noted that 1960 was the first year the Malaria Eradication Programme was 175 657 164 extended into the Upper Barama area. At that time, 271 smears were taken and 23 were positive for malaria. This is an incidence of malaria for 8.6 percent of the population tested. The Malaria Eradication Programme resumed in the Upper Barama area in the summer of 1966. At that time, 314 people were tested. Of this number,

[TEXT CONTINUED ON PAGE 60]

TABLE 6

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AGE STRUCTURE AND SEX COMPOSITION OF THE CARIB INHABITANTS IN THE UPPER BARAMA RIVER DRAINAGE BASIN INCLUSIVE OF AND ABOVE KOKERITE, 1960*

	male	percent of total male	female	percent of total female
65 and over	3	1.1	0	0
45-64	25	8.8	21	.5
15-44	116	40.7	120	42.9
2-14	128	44.9	125	44.6
under 2	13	4.6	14	5
Totals	285		280	
Complete Population Total		565		

*table compiled from pages 5-31 and 5-32 of the 1960 Government Census

82 had malaria and 126 had had it recently. Together, this is an increase to 66.9 percent of the tested population. In the fall of 1967, there were 412 people living in the Upper Barama area according to the Malaria Eradication Programme reports. Of this number, 396 were tested for malaria. At that time, only 14 were positive for the disease, 23 were positive for recent fever. This is a reduction to an incidence of 9.3 percent of the tested population in little more than a year. Since then, there have been no positive tests for malaria in the Upper Barama area.

More short term campaigns have been made to treat other diseases among the Upper Barama Caribs. Although there are no records of mortality among this population, epidemics which have caused multiple deaths have been attended by medical teams from Georgetown. In the summer of 1966, about 150 people were treated during an epidemic of measles. Later, an outbreak of gastroenteritis received the attention of a medical team. Seven people died during this last epidemic. Most other deaths have been single events.

There are no reliable records for the incidence of other diseases. Worms and other parasites are still a major health problem. This is especially the case around Baramita Air Strip with so many families commonly using small creeks for all purposes. There has been some efforts to promote the use of pit latrines, and four of these are in existence at the Air Strip. Also, malnutrition is a health factor. During the year of field work, weight loss was observed among the people who had been dependent on employment at the mine. Also, burnished hair and pot bellies, signs of protein deficiency, are

This may occur with a young mother with an insecure relationship with the father or a child that is not her husband's. Also, a poor subsistence situation may inspire a woman to neglect or kill her infant. From the confidences expressed, there have occurred about five cases of infanticide over the last ten years. Aside from these measures, some women have expressed desires to limit the number of children they produce but profess a lack of knowledge on how to do so. With every fertile woman approaching the fulfillment of a potential to reproduce twelve to thirteen children, the implications for accelerating population growth are apparent. Also, with medical attention and other government assistance, the number of children who survive has increased.

Over the last forty years, the reproductive pattern of the Upper Barama River Carib population seems to have responded to changes in economic conditions. There is no evidence to demonstrate that this population was ever in any long period of equilibrium with regard to its size, or well regulated by cultural practices to maintain it below any direct relationship to fluctuations in local food resources. On the contrary, it appears that this population previously underwent conditions of famine from time to time. King (1968:16) reports a drought for Guyana every thirteen to fourteen years. Although there are no direct records kept for the Upper Barama River area, there are indications of periodic local food shortages. In the six years previous to the establishment of development programs at Baramita Air Strip, the Government was called upon twice to send relief food packages to the Caribs not directly involved in mining. However, by this time, the total population was influenced by the mining

economy. The most suggestive insight into a longer familiarity with conditions of famine comes from popular stories. Cannibalism and other drastic measures in times of subsistence crises are a pronounced and recurrent theme.

It would appear that the behavioral measures designed to limit population have been practiced mainly during times of subsistence stress. Decisions regarding population control were probably made by the mother alone relative to her own circumstances.[17] The net result was a relatively limited rate of reproduction for the total population. These solutions were abandoned as subsistence stresses were alleviated by the availability of external resources. Since the introduction of employment and other market opportunities and government subventions after 1940, the Upper Barama River Carib population has not been subject to fluctuations in local resources. Even those segments of the population not directly employed have been affected. The point to emphasize is that external resources need not have been constantly available to the total population to affect the reproductive pattern of the total population. Only some access to external resources conveyed through regional networks of exchange needed to be available during times of subsistence crisis.

NOTES

175 162 114 [173] [1]It is improbable that the exact history of the current Upper Barama River Carib population can be established. Schomburgk, during his surveying of the North West District in the 1840's, found Akawai as well as Carib settlements on the Barama River (1848:359-363). Gillin, of course, found only Carib settlements in 1932-33 and suggests that the Caribs usurped the Akawai position in the area. Gillin records a local tradition that the first Carib ancestors migrated from around the head of the Corentyne River to the Barama River and concludes that the ancestors of the Carib population had been in the area only for about 200 years (1936:113).

162 166 [173] During the 1970-71 field work, it was discovered that several male Carib ancestors with significant numbers of offspring in the current population had migrated into the Upper Barama River area from the Pomeroon River area. Some had done this to escape the widespread influenza epidemic after World War I. Also, at least some Caribs currently maintain that according to tradition, the first ancestors to populate the Upper Barama River area came either from Venezuela or the Cuyuni River area. In any case, the question of these origins does not pertain to the analysis being developed.

000 [551] [2]Carib nicknames remain in use (Gillin 1936:77-78). Individuals guard the privacy of these names to different degrees. Western names are also used. In addition to a chosen first name, the father's first name is usually taken as a last name. Thus Manuel Jacob's son is called Francis Manuel.

[103] [3]In addition to nine obvious Carib settlements in the Upper Barama River area, Gillin includes the location of "John's Settlement" and "Old World" with no indication of their nature (1936:2). Their names highly suggest mining camps of some sort.

Also, Gillin reports the abandonment of two settlements, Massevah (same as Maswakai) and Korotoko (1936:125,135), which were subsequently reinhabited. In consideration of all of these factors, the estimated figure of ten inhabited settlements appears to be appropriate.

[103] [4]The Upper Barama River Caribs explain that the Carib name for this settlement is Sevalipialu and that the abbreviation Sawari is used with non-Carib people. The shorter name, consistent with Gillin's usage, is maintained here.

[5]Gillin later revises this estimated range to seven to seventy individuals (1936:98), but the first more conservative estimate of settlement size appears to be more appropriate for the Carib settlements in the Upper Barama River area.

[361] [103] [197] [6]It must be pointed out that the Carib people recognize a distinction between the group of settlements in the upper section and the lower section of the Upper Barama River. They refer to the former as Barama Top Side and the latter as Barama Bottom Side and claim

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

IV

MARKET OPPORTUNITIES: REGIONAL NETWORKS OF EXCHANGE

Over time, the subsistence economy of the Upper Barama River Caribs has been supplemented by various regional markets. As a consequence, the common material exchanges that serve the Upper Barama River Caribs as a population have changed. An increasing extralocal involvement in regional networks of exchange has been added to a local adaptation to the rain forest, and new resources have been made available to this population.

During Gillin's study in 1932-33, subsistence resources were derived primarily from the natural environment. The similar nature of the local adaptations of the Carib settlements dispersed along the Upper Barama River corridor has been discussed. There was no apparent basis for specialization and trade among settlements. Within each settlement, material property was individually owned. A man owned his clothing, field, house, hunting and fishing equipment, canoe, tools, and the game he caught (Gillin 1934:335). A woman owned her clothing, implements for working in the field and house, including pottery and basketry (although basketry was exclusively made by the men in their household). All tools were usually manufactured by the individual owning them or someone in their household. Within settlements, food was distributed, tools were shared, and assistance rendered in the activities of making a living in the bush.

*177 439 [412] [415] [175] Throughout the time period under consideration, commercial trade goods have been incorporated, mostly by way of substitution for their local equivalent. Axeheads, cutlasses, knives, iron griddle pans, cotton cloth, and shotguns reached the population in varying degrees at the time of Gillin's study (1934:332). These trade goods did not lose their popularity. They have been added to by other external resources and their quantity and availability have been increased. [163] [61] [511] [621] Eventually, a flow of external goods and services into the Upper Barama River area has resulted in an increased birth rate and an increasing population size, an improved standard of living, and changes in the social organization of the population.

*177 175 443 [484] However, markets have been introduced and controlled by external agents. As has already been explained, the Upper Barama River Caribs do not have easy access to regional markets. They do not travel to transact regional exchanges. Rather, they have depended on the opportunities provided by non-Carib middlemen who reside in the Upper Barama River area and who have good access to the limited transportation and communication facilities. As characteristic of the conveyance of regional exchanges into remote areas, market opportunities have been highly personalized. This was characteristic of the early period of porknocking activities and the existence of the gold companies. Personalized market networks continue to be associated with government programs and services at Baramita Air Strip. [657]

*177 175 437 439 Market Opportunities Provided by the Early Gold Seekers

The earliest regional exchanges reported for these Caribs involved

food. Such exchanges were realized with the early prospectors. Provisions, especially cassava and meat, would be traded for salt, tools, tobacco, glass beads, and also money. Occasionally, parrots, monkeys, varacabras, and other pets were traded to these porknockers. Exchanges would occur more or less by chance. A porknocker might wander into a settlement and wait until the bashful residents had recovered themselves sufficiently to come out of hiding and deal with him. There was little bargaining. Rather, each party approached the exchange as a nonrecurring opportunity. When prospecting became more familiar among the Caribs, private ownership was recognized in gold creeks (Gillin 1934:335). The individual who discovered a specific creek was considered to be the owner. He could sell it, usually to a porknocker who came.

Eventually, Carib men exchanged short term periods of labor for trade goods. Often this work was done for a specific object. Guns which could be purchased over the counter in Georgetown were especially desired. An Amerindian would often be asked to cut down a large field and build a house for such a payment. However, as Gillin reports (1936:131), Caribs were not always so easily induced to work. The men of Sawari refused employment by a prospector as they felt his trade goods were too meager. The Carib men had to desire the goods to be traded and also be assured of actually being paid and not expoited. It was some time before individual proknockers with their recurrent trips to the Upper Barama River area were able to count on help from specific Caribs. Even longer periods of trust were necessary before these Caribs agreed to work in return for specific trade goods

*199 the porknocker would bring on his next trip from Georgetown.
• 195 However, relations with porknockers remained as transient as the
439 porknocking operations themselves.
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In short, these early opportunities were of a windfall nature.
*199 Neither porknocker nor Carib was economically bound to the other.
195 Thus, these were associational relationships. With the establishment
439 of trust, both the porknocker and Carib cooperated for mutual benefit.
439 If a porknocker abused an Amerindian, he and often others would no longer work for this person. The reputations of Amerindians were also important. These early, individualized exchanges served to bring in trade goods which were incorporated into the existing subsistence
[511] pattern of the population. However, it was not until the presence of the mining companies that market opportunities were localized and of a sufficiently permanent nature to affect the local Carib subsistence routine.

Markets Introduced by the Gold Companies

*199 Population data suggest that there are significant changes in the
195 nature of reproduction among the Carib population in the time periods
163 before and after 1940, when mining companies were first established
511 in the Upper Barama River area. A more precise investigation of the relationship of the local population to new market opportunities introduced by the gold mining companies is in order. It is not assumed that there is a definable equation between the quantity of trade goods reaching this population and an increased rate of birth. The process of adaptation to these new markets does not appear to be

*177 that simple. Rather, guns and iron tools substituted for tools
• 175 fashioned from bush materials tended to increase the efficiency of
163 the exploitation of the rain forest. In addition, the more permanent
511 availability of clothing, medical care, and food supplies tended to override any cyclical changes in local subsistence resources which would affect population size. Moreover, at no time were detailed records kept of the quantity of trade goods which reached this population as a consequence of the activities of gold mining companies, and at the onset of field work, these patterns of exchange no longer existed. Nevertheless, these regional networks of exchange and the involvement of the Carib population can be reconstructed.

*177 All the mining companies introduced some exchange opportunities.
175 Only Baird's company, which persisted for over thirty years, signifi-
464 cantly involved the local population. Only Carib men were employed as the work included carrying loads, hunting, cutting fields, and mining activities. Also, a majority of the adult men in the Carib population was never employed at one time. Yet, the employment opportunities resulted in channels for the dispersion of exchanges to a wider section of the population.

During the initial establishment of the companies, the Caribs did not comprise a reliable labor force. Laborers were brought in from Georgetown. While the Axel Johnson Company was still in operation, Baird and his partner had some problem with the desertion of coastal laborers. As a big company, Axel Johnson paid higher wages. Of course, the competition ceased when the Axel Johnson Company was closed. There occurred other problems in relation to the number of

*177 • 175 464 laborers from the coast. A 1953 list of Baird's workers at Millionaire includes a mechanic, engineer, manager, foreman, and twenty-six laborers from the coast. Coastal workers still predominanted a year later when they held a strike for higher wages. They were granted their request. A few years later, other coastal workers held a second strike. By this time, a number of Carib men were in steady employment. With this reserve of local laborers, the coastal men were sent away. Manganese operations were opening up at Matthew's Ridge and these coastal men went there.

This reliance on Carib manpower was accomplished gradually. Many Carib men were anxious about working in the mine shaft. However, in time, Caribs gained confidence and skills and eventually totally replaced miners from the coast. Permanent employment was available for a core of workers. Jobs were available to others with changes in production or with the undertaking of special projects such as the road built between the air strip and In Time in 1964. At the height of his activities in the middle 1960's, Baird employed about fifty Carib men. At the time, this was a little less than fifty percent of the adult male Carib population. Later, Baird cut to thirty-two workers before finally phasing out his mining enterprise. In contrast to previous employment opportunities which briefly separated a man from his subsistence schedule, these mining opportunities with Baird resulted in a very different routine among the Carib men.

[241] [466] Specifically, Amerindians at the mine eventually left aside subsistence farming. Baird imposed a work schedule on a weekly calendar. The more permanent day work was from 6:30 to 11:00 in the morning and

from 12:30 to 4:00 in the afternoon, Monday through Saturday. Over time, salaries varied. During the last years of the company, men were usually paid about $4 a day. At this time, men also earned the equivalent of $4 a day for job work for which the terms were more flexible. Considerable inputs of human labor were included in all aspects of mining activities; cutting loggings, feeding a ball mill, turning a winch, shoving a wheelbarrow and so forth. When operations were of such a nature that the shaft had to be continually pumped of water, shifts worked around the clock. During these times, if a worker failed to come, Baird would take his place. As a standard procedure, Baird would suspend a worker for two weeks if he failed to turn out for a scheduled work period. In the Upper Barama River area, remote from transportation and communication networks, the need for a reliable labor force was thus stepped up with an increased industrialization of the mining enterprise.

Baird had a need for a limited number of workers, but increasingly, he needed workers who were experienced, dependable, and could be called out for any emergency or change in work schedule. On the other hand, permanent workers, without any other immediate subsistence resources on which to rely, sought assurance of job security. Throughout the existence of the mining enterprise, there were fewer jobs available than men wishing to be employed.[1] A situation was promoted in which Baird and the Carib workers made mutual demands, characteristic of the generalized but asymmetrical economic reciprocity conveyed in the personal relationships between a patron and his clients.

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[484] Baird further sought to secure Carib clients with special benefits. He tended to the emergencies of his workers and their families day and night. From time to time, Baird made trips to Georgetown possible by allowing workers to ride one way free on the charter flights which [871] left the air pool and later the air strip empty. In 1966, he started the first school. It was built at In Time and staffed by a teacher Baird privately paid.

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[434] Baird's trade store was operated primarily as a service for the workers. Local provisions were bought and sold at the same price. This policy was used also with many foods flown in from Georgetown. The thirty-two or more workers who earned about $4 a day had an income of approximately $1200 a year. As these workers had only small gardens and their wives and other members of their households enjoyed a great deal of leisure, most provisions were purchased. Cassava bread, the staple, sold for 16¢ a disk which is about a half inch thick and two feet in diameter. Local fish and meat sold for about 40¢ a pound. Rice, sugar, salt fish, canned milk, tinned sardines, and other foods were available. The store stocked a variety of implements for hunting, fishing, farming, and doing household chores. It also stocked cigarettes, matches, soap, cloth lengths, and manufactured clothes. Baird [452] extended each worker up to $100 credit and arranged special purchases. These included guns[2] and radios. One Carib man bought a portable, [454] manually operated Singer sewing machine in this manner. As there was no opportunity for investment, a worker would hide away somewhere about his house any cash he did not immediately use to make purchases.

[241]
[461]

*177 • 175 438 443 The trade store was the main vehicle for the involvement of the remainder of the population in regional exchange. With the establishment of Baird's enterprise, there was a constant call for local foods which the trade store stocked. Caribs not employed at the mine were then able to sell these foods on a more or less planned basis. The residents of Aranka, Baramita, and later the Air Strip, did this regularly. Caribs in the more remote settlements made more infrequent trips. However, the quantities required were limited. No special fields were cut nor special crops planted. Part of the regular subsistence production was used for these exchange purposes. Also, there operated informal consignment agreements. When a supply of meat, cassava, plantains, yams, or whatever ran low, individual men were invited to bring these to the store. Often no money changed [437] hands. Rather, small accounts were kept. In addition to exchanges centralized by the trade store, some exchanges occurred directly between Caribs. The prices used were those at the trade store. Also, 175 *177 799 439 for a short time, the missionaries contributed to the market opportunities in the area by occasionally hiring a few laborers, by buying some local handicraft items, and by selling food and clothing.

*177 175 657 622 Before the mine closed in 1969, one other development occurred which further involved this population in regional exchange networks. A local administrative structure, devised and implemented by the Ministry of Local Government, has been imposed on Amerindian populations to promote national political integration.[3] Amerindian [666] offices were first introduced among the Upper Barama River Caribs with an election held at In Time in October 1967. From among four

candidates who were unemployed at the time, one man was selected by the largest number of votes to serve as Captain for a four-year term. Other candidates for the Captaincy became Councillors. Of these offices, only the Captaincy is a salaried position. It receives $150 a month.[4] The duties of these offices, which have been more clearly defined with the government settlement project at Baramita Air Strip, have provided a basis for the redistribution of the Captain's salary to a wider section of the population. However, the office of Captain among the Upper Barama River Caribs does not differentiate the officeholder in any sustained fashion from the rest of the population. Similar to other forms of local employment in the Upper Barama River area, the Captaincy is not a vehicle to gain a control in regional markets or to accumulate deployable forms of capital.

Previous to the establishment of the mining companies, the dispersed Carib settlements tended to be closed with regard to obtaining and sharing local subsistence resources. This pattern was apparently little disturbed by the first trade goods brought by the mobile porknockers. However, the money economy and the centralized channels of regional exchange introduced by the mining companies markedly altered Carib subsistence. External resources came to be critical to the subsistence patterns of the expanding local population, and settlements became more centralized around their source. In 1969, Baird's mining activities were directly supporting 171 individuals or 33.9 percent of the total Carib population at the time. Located nearby at Baramita, Aranka, and the Air Strip, another 190 individuals

*177 • 175 361 438 [484] or 37.7 percent of the total population frequently sold provisions at the trade store. This segment of the population also participated in the ancillary regional exchange networks provided by the missionaries and the Amerindian Captain. The remaining 28.4 percent of the population, the 143 individuals in the more remote settlements, made more infrequent trips to the trade store at In Time. Either through informal trade among Caribs themselves or the centralized channels created by the trade store, mining activities involved the entire local population in a common network of regional exchanges. In turn, this network was changed by the abandonment of In Time.

Regional Exchanges Centralized at Baramita Air Strip

*177 175 464 511 The cessation of mining activities late in 1969 again altered the subsistence patterns of the local Carib population. That segment of the population dependent on employment at the mine and maintaining no farms was faced with a subsistence crisis. The opportunities for the remainder of the population to sell provisions was greatly reduced.

*177 175 464 657 During the spring and summer of 1970, the Government began introducing programs and services to sustain this population. The new governmental offices have already been detailed (see Figure 3). The resources conveyed to the population through these new channels remain to be discussed. As data are available only for the first year of these new programs at Baramita Air Strip, this must remain a preliminary report.

*177 182 [463] The first year at the Air Strip was one of general parsimony. Job specialization among the Caribs was almost eliminated and everyone returned to rain forest subsistence.

V

SOCIAL ORGANIZATION FOR SUBSISTENCE AND EMPLOYMENT

Although the resources for subsistence and the organization involved in exploiting them have changed, the household has remained the primary cooperative economic unit among the Upper Barama River Carib population. There is no land tenure, no accumulation of capital in any form, and no inheritance of any consequence. Thus, household composition and the relationships among households have conformed to the immediate situations affecting the problem of subsistence.

Subsistence in the Rain Forest

For the 1932-33 period, Gillin reports that a household was composed of a man and his wife or wives and their unmarried children. These children include their own and ones that have been adopted. A relative from the older generation might be absorbed as a dependent. Divorce or death could dissolve a household, the remaining members joining existing households or forming new households with available partners. There seems to have been universal marriage for everyone of reproductive age, making the household coterminous with the family (1936:80).

Households were settled in their cultivated fields. A house structure was commonly a pole frame covered with a roof thatched from various palm leaves. Dimensions varied from six to over thirty feet

175 342 (Gillin 1936:31-9). As a house became dilapidated, it would be used for cooking or storage purposes, and a new one built to support the hammocks of the various members of the household.

175 584 [582] Preparatory to a marriage, a young man was required to cut a field and build a house nearby and pass a hunting test given by the bride's family. This appears to have been a formality that finalized an agreeable relationship among all concerned (Gillin 1936:74-75).

175 591 [606] At first, the young husband resided with his wife's family. During this time he cooperated actively with his wife's father and other male relatives still in the household. Expressive of the temporary nature of the extension of the family, the young man rendered his father-in-law deference, usually not talking to him directly but [851] through his daughter. This period of matrilocal residence generally would end soon after the birth of a first child (Gillin 1936:97). The newly established household was then an autonomous unit.

175 476 571 621 [462] As for the cooperation among households, this principally involved men's activities, farm cutting, hunting, canoe building, house constructing, and the like. In these instances, cooperation is not necessary, but rather expedient. As a result, patterns of cooperation lacked permanence and explicitness. Friendships among men seem to have been the basis for recruiting work partners. Women cooperated as well, but their friendships had no consequences in social organization (Gillin 1936:136). The adult men moved their households about [592] freely to enter into associations with other men from households in the vicinity. In general, cooperation developed among "brothers,"

175 476 593 605 [591] actual siblings and parallel cousins (Gillin 1936:97), and these kinsmen tended to settle near each other.

175 kinsmen tended to settle near each other. At times such as during
476 the field days held for poisoning a creek for fish, all the men and
593 women in one location would cooperate (Gillin 1936:11-12). Gillin
605 [621] reports that the extent of mutual cooperation among "parallel kinsmen" made these stronger bonds than that between a man and his son-in-law (1936:97), and aggregations of their households composed a settlement such as Savari.

175 592 621 [595] At the time Gillin visited Savari, it was composed of three clearings or aggregations of cooperating households. The largest of these, John Miller's clearing, included seven adult men (1936:117-125). Miller, about forty, was prominent among them. He had had a previous marriage but currently had a new young wife and was acquiring her younger sister as well. His father-in-law was an old man, David. Two of Miller's widowed sisters had recently attracted into the group two brothers, Henry and Samuel. Their other brother, Colombus, with his child bride was also present. Two young men, Joseph, a son-in-law of David, and Joseph, a son of David, completed the group of men.

175 476 621 All of these had apportioned plots in a field Colombus and Miller had originally cut and David and his son Joseph had enlarged. The temporary partnership in fields was dissolving as the newcomers to Savari were establishing fields of their own (Gillin 1936:134). Other mutual assistance such as hunting and canoe building was conducted between various men in this clearing and those in the other clearings on an individual basis according to the inclinations and the sway of influence to which each man was subjected.

175 John Cook was probably the same age as Miller (Gillin 1936:125-8).
571 Several years ago upon the death of his first wife, he was attracted
159 to Savari out of his friendship with Miller. He consequently took a
621 kinswoman of Miller as a wife.[1] As Cook became established in Savari, he attracted men in his own right. As he did so, his friendship and cooperation with Miller waned. Expressive of this rift is their discontinued participation in a common cassiri spree,[2] the one form of public activity including ritualized behavior. During Gillin's visit, Cook's group ceased attending Miller's cassiri sprees but held their own. In addition to Cook, there were three men in his clearing. These included his half-brother Daniel and his half-sister's husband, Henry Daniel, who is also a fourth brother to the group of three in Miller's clearing. Also, a man named John, about thirty-five, had moved his household to Savari on the basis of his friendship with Cook. All of these men together had cleared a field and had the use of respective plots in it.

The third clearing was that of a single man, Edwin, who was also a contemporary of Miller and Cook. Edwin farmed by himself. However, indifferent to the enmity between Miller and Cook, he assisted both of them at times with other tasks such as constructing a cassiri kanu and a woodskin boat. Gillin suggests that Edwin's failure to attract a group around him is due to his lack of leadership qualities (1936:127-128). It is also clear that Edwin at this point in time does not have the same advantage as Miller and Cook regarding marriageable female relatives with whom to negotiate these satellites. His oldest child was a male about sixteen. His other children were daughters under twelve years of age.

daughters under twelve years of age.

As is apparent, a man's position in a settlement was in part the result of his human capital of female relatives, sisters and daughters, and how he used these to attract men around him. However, a son-in-law was only a temporary dependent. In contrast, the associational bonds that developed between cooperating parallel kinsmen had no definite time span. There occurred varying degrees of cooperation as well as numbers of men involved, the only limit to the relocation of a household being the several months needed for a field to begin to be productive. However, in the context of the cooperation among related kinsmen, a general pattern emerges with regard to a man's life career. Except for old David, all the men in Sawari were younger than Miller, Cook, and Edwin. These three men, at about age forty, were no longer dependents as the younger men were, but were established in their own clearings. They were having different success attracting young men according to the contingencies of available female relatives as well as their personal qualities. When their energies and human capital were becoming exhausted, they again would be dependent members in a settlement, much as old David.

Such dispersed settlements, which fluctuated in size from about fifteen to fifty individuals, constituted the largest social unit (Gillin 1936:141). Within settlements, there was no differential access to local subsistence resources. Individual men who were shamans or sorcerers privately owned knowledge and magical skills, but this had little effect on their participation in the subsistence routine. A headman was recognized in each settlement (John Miller in

175 622 A headman was recognized in each settlement (John Miller in Savari), but his authority rested on his influence. Aspects of personality, the number of relatives, as well as physical strength were factors in the choice of headman. Although the duties of headman lacked definition, for the most part they involved coalescing group opinion and action. All of this was done informally. Group action 175 627 would be taken against individuals who threatened the pattern of sharing resources and rendering assistance within the settlement. Ostracism, exile, or, more rarely, violence would be employed (Gillin 1934:337).

175 [648] [701] [622] At this time, the Upper Barama River Caribs constituted an indigenous population within a British colony. In this colonial environment, there was no organization among these Caribs for war or defense which would compel leadership (Gillin 1934:344). Dispersed in the 175 628 rain forest, remote from the center of European power, there was no other basis for unity among this population. Before extensive regional trade and a money economy were introduced by the mining companies, these dispersed settlements tended to be closed with regard to patterns of obtaining and sharing subsistence resources. Exchanges *177 621 among settlements involved shifts of personnel. Increasingly, the boundary of the resource sharing social unit has become constricted within the larger, more stabilized settlements around centralized networks of regional exchange.

Organization for Gold Mining

*179 592 464 In addition to centralizing settlements, employment and other market opportunities provided by gold mining activities from 1940 to

*177 476 the dependent partners are identifiable. This contrasts to the associational nature of the previous pattern of cooperation among the Carib men.

*177 • 175 462 The increased isolation of the family group resident in a clearing has affected the assignment of tasks according to sex. Gillin reports a discrete separation of tasks (1936:3,46,51,71). Men would hunt and clear fields, construct houses, canoes and cassiri kanus, and do all basketry and plaiting. Women would harvest cultigens, gather edibles from the forest, prepare all food, sew, tend children, and exclusively assist in childbirth while the men were not allowed in the clearing. Men and women would cooperate to plant fields and poison streams for fish. During 1970-71, men were observed in their own households engaged in all of those tasks which previously were allocated to women. For the most part, women's tasks are those which must be done on a daily basis. Men assisted with the activity when the females in the household were otherwise indisposed and there was [844] no wider circle of females to call upon. Men now commonly deliver their wife's children. Women, on the other hand, were not observed taking part in any of the men's activities.

*177 437 [436] Exchanges between people from households in different clearings are now conveyed in terms of immediate exchange. Barter has been used, but increasingly the exchange of labor, food, or craft items is conducted with money. Labor assistance, including help in clearing and planting fields, building houses and cassiri kanus, and processing cassiri, is paid for either in food or money. Manioc tubers, the prepared cassava cakes, turtles and other bush meat are

*177 464 465

*177 43

000 household context is reflected in the kinship system.

Kinship

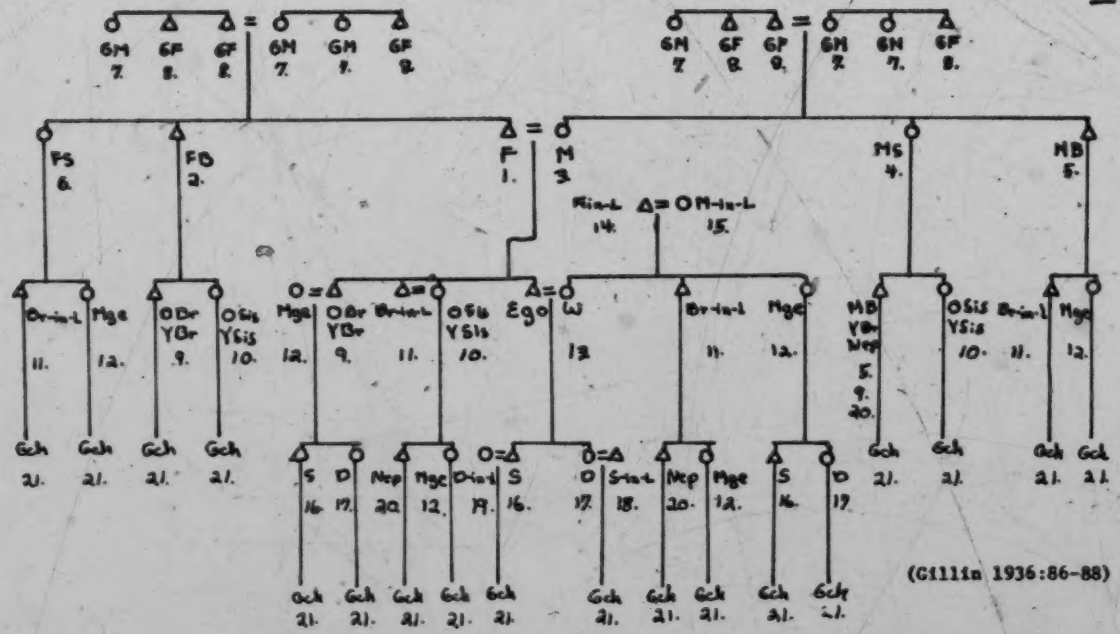
*177 601 Persistence and change in elements of the kinship system are in keeping with changes in household composition and relationships among households. The kinship system in use during Gillin's field work is reported in Figures 14 and 15. Figures 16 and 17 present the kinship system in use during 1970-71. Table 13 compiles the Carib terms used by males; Table 14, those used by females.

601 Basically, this is a cognatic system with Iroquoian features. Categories of individuals in three middle generations, ego's and the immediate ascending and descending generations are identified. Aspects of bifurcate merging are evident in all three of these generations. The terminology extends one more generation in each direction. However, all individuals in the categories grandmother, grandfather, and grandchild are socially identical. There is no further lineal extensions. Although Gillin entertains the possibility (1936:90-98), there is no premise for sib or clan organization. Rather, this is a particularly egocentric kinship system. Its major purpose appears to be the categorization of people for each individual. A person's sex and age affect the manner in which related individuals are designated, and the changes in the system of categorization reflect shifts in the patterns of interaction among categories of people.

[114] [614] [618] [561]

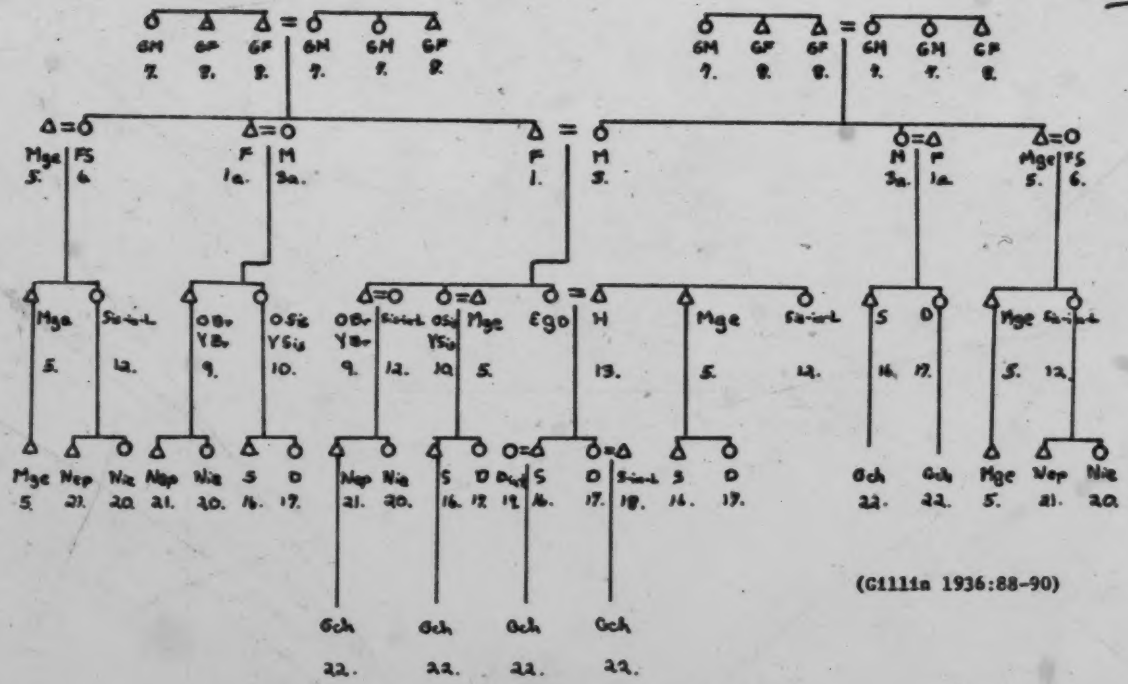
• 175 601 The kinship system as reported by Gillin is one particularly suited to operating among a relatively small, endogamous population

[TEXT CONTINUED ON PAGE 130]



(Gillin 1936:86-88)

Figure 14. Kinship System, 1932-33. Terms of Address and Reference, Male Speaking.



(Gillin 1936:88-90)

Figure 15. Kinship System, 1932-33. Terms of Address and Reference, Female Speaking.

2: Adams E-4,5 (1970-1971) 1973 SR9 Cardh SR9
(1932-1971) Barama River
109 195 501

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

TABLE 13

KINSHIP TERMS FOR ADDRESS AND REFERENCE, MALE SPEAKING

	1932-33	1970-71
1. F	papa	papayo
1a. FB	papako	2. yumuko
3. M	tata	mamayo, tatayo
3a. MSis	tatako	4. seanoko
5. MB	iyao	yaʾoko, yawole, kaʾtopo
6. FSis	wopui	wopu ko, yaopule
7. GM	pipi	pipi
8. GF	tamoahi	tamosi, teamolo
9. OB	tseo	seo
YB	kami	pije, pide, poʾchole
10. OSis	wa'a	wa'a
YSis	mimbo yenatu	yenate
11. B-in-L	pamuko	pamŭko
12. Marriageable	takano	teakano
13. Wife	puitu	puete
14. F-in-L	imuru tamuru	tambalacon, ë'mëtamolo
15. M-in-L	imurnote	ë'mënote, ë'mënoyang, puetesano
16. S	imuru	emŭlŭ, poʾchole
17. D	yenwidye (yemare)	yemuje, yemueale
18. S-in-L	pwariaye	puealë'më'
19. D-in-L	parisano	puealesano
20. Nep.	pwatumu	pueatë'më'
21. Grandchild	ipwaru	pueale

2: Adams E-4,5 (1970-1971) 1973 SR9 Carib SR9
(1932-1971) Barama River

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*177
601

TABLE 14

KINSHIP TERMS FOR ADDRESS AND REFERENCE, FEMALE SPEAKING

		1932-33		1970-71
1.	F	papa		papayo
1a.	FB	papako	2.	yumuko
3.	M	tata		mamayo, tatayo
3a.	MSis	tatako	4.	seanoko
5.	Marriageable	iyaoko		yaʾoko, yawole, kaʾtopo
6.	FSis	wopuko		wopuʾko, yaopule
7.	GM	pipi		pipi
8.	GF	tamoshi		tamosi, teamolo
9.	OB YB	waʾako kamicho		waʾaiyo pije, poʾchole, kaʾmicho
10.	OSis YSis	waʾa kami		waʾa, pwaje maʾmio, piche, kaʾmicho
12.	Sis-in-L	yedote		yedote
13.	Husband	unya		ünyo
16.	S	uimwe		ëʾmë, poʾchole
17.	D	yemwidje		yemuje, yemueale
18.	S-in-L	pwarimye		peualëʾmë
19.	D-in-L	parisano		puealesano
20.	Niece	pwase		pwase
21.	Nep.	pwatumu		pueatëʾmë
22.	Grandchild	ipwaru		pueale
			23. FBSS	pamüko
			24. FBSD	teakano

175 601 [587] to provide personnel for universal marriage and the wider circle of cooperating kin. The practice of the levirate and sororate as well as sororal polygyny (Gillin 1936:92) are consistent with this kinship system in which the identities of members of the nuclear family are merged with specific collateral kin. For both male and female egos, father and father's brother are identical and distinguished from mother's brother. Mother and mother's sister are identical and father's sister is a separate category. For the male ego, parallel cousins are identical with siblings and distinguished from cross cousins. For the female ego, this pattern pertains except for the designation of maternal parallel cousins. These individuals are categorized as the female ego's own children and reflect a provision for marriage with mother's brother. However, most commonly, symmetrical cross-cousin marriage was practiced. In the genealogies Gillin recorded, one third of the marriages were of this type (1936: 93). He recorded only two marriages with sister's daughter (1936:95).

175 582

With this one exception, the only fictive erosion of generational levels concerns the categorization of marriageable partners. For males, these people are in his generation and the one below his. They include his female cross cousins and sisters-in-law as well as the daughters of his male cross cousins and his sisters' and parallel female cousins' daughters. With the practice of cross-cousin marriage, a particular female may fall into more than one of these relationships. Also, all strangers of the opposite sex and generally of the same age are included. For females, marriageable categories occur in all three middle generations. These are mother's brothers, male

175 582 cross cousins, brothers-in-law, and male cross cousins' sons. Again, a particular male may fall into more than one of these relationships. All strange males of approximately the same age are also included.

175 605 602 Thus, this kinship system is in keeping with the subsistence organization among the Upper Barama River Caribs for the time period before the introduction of external resources. Adult brothers as well [476] as parallel cousins tended to render each other mutual assistance and [593] thus live near each other. With the practice of cross-cousin marriage, [582] these men tended to marry sisters or women who were parallel cousins to each other. Thus, a child tended to grow up in the company of his [768] parallel cousins, who were equated with his siblings. If his actual [736] mother or father died or otherwise left, they would likely be replaced by other individuals already in the child's horizon of interaction as people in the categories of mother and father. Symmetrical cross-[582] cousin marriage was extended to provide for the contingencies of recruiting marriageable partners in a small population. With regard to marriage with sister's daughter, this is not a separately designated category. Rather this person is merged with a much larger category of marriageable individuals.[8]

*177 601 [476] The new organizational strategies are apparent in changes in the kinship system. The discontinuation of mutual assistance among men who are brothers or parallel cousins and a greater longevity of people have change elements of this system. In the first ascending generation, father and father's brother and mother and mother's sister are all separately designated. Previously, father and father's brother were one identity. Mother and mother's sister were also merged as one category.